

<u>CAUSE</u>	<u>SYMPTOMS</u>	<u>TREATMENTS</u>	<u>DETERMINING DX</u>
<ol style="list-style-type: none"> 1. Motor Vehicle Crash 2. Repetitive Microtrauma 3. Trauma 4. Over/Repetitive Motion 5. Degeneration 6. Poor Posture 7. Desk Jobs 	<ol style="list-style-type: none"> 1. Localized pain 2. Pain with Extension 3. Tenderness at Segment 4. Referral Around Ribs 5. Sharp pain into Ribs 	<ol style="list-style-type: none"> 1. Chiropractic Care 2. Physiotherapy 3. Heat/Ice 4. Medication 5. Electrical Stim. 	<ol style="list-style-type: none"> 1. Physical Exam 2. Ortho/Neuro Exam 3. X-ray/MRI 4. CT Myelogram (rule out other diagnosis) 5. All imaging would be to rule out all other diagnosis

THORACIC FACET SYNDROME

A natomy & Background

The thoracic spine, or mid back, is the largest section of the back and includes 12 vertebrae, with an intervertebral disc between each. The vertebrae are the bony building blocks of the back and spine. They are designed to protect the spinal cord, provide support and structure to the spine, and carry the weight of the head, neck and trunk. The



vertebrae of each section of the spine are slightly different and specific to the function of that area. Each level of your spine functions as a three-joint complex. There are two facet joints in the back and a large disc in front that comprise each intervertebral segment. This tripod creates great stability,

supports all your weight above each level and provides support for you to move in all directions. The posterior facet joints are synovial joints, similar to other joints in the human body. They experience constant, repetitive motion, and can become worn or torn. They also can become restricted in movement or develop too much movement resulting in pain. The facet joints are shaped and angled differently in the cervical, thoracic and lumbar spine. This allows for all of the available motion within the spine.

Pain stemming from the facet joints is termed “facet syndrome.” The facet joints become inflamed and may cause pain, soreness and stiffness. Patients often report increased pain with extension or prolonged periods of inactivity like sitting or standing too long. Changing positions often improves pain. Facet syndrome pain may feel worse in the morning and improve after moving around as the day progresses. However, for those who work sitting all day with poor posture, they may experience pain throughout the day.

Spinal Facet Joints

All thoracic vertebral levels consist of three joints. There is one joint consisting of the intervertebral discs which connect the bodies of the vertebra. There are also two posterior and lateral joints with one on each side called facet joints. The facet joints provide support, stability and facilitate motion of the thoracic spine. Facet joints are synovial joints, which have a smooth shiny contact surfaces called articular cartilage. The articular cartilage allows the bones to slide freely over each other with reduced friction and stress. Each joint is also surrounded by a protective sleeve called a capsule, and is lubricated by synovial fluid. The facet joints can become irritated and inflamed producing pain and dysfunction. Each thoracic vertebra has a pair of ribs, one on each side. The twelve ribs form the thoracic cage and serve to protect the vital organs of the body (lungs, heart, liver, kidneys etc.) The nerves of the thoracic spine provide sensory and muscle innervations to the trunk and part of each arm. Additionally, the internal organs of the body supply these nerves. The thoracic spine has less movement than the cervical and lumbar spine. The greatest amount of movement is forward bending or flexion. The ribs limit side bending and rotational, or turning, motions of the mid back.

Causes of Facet Syndrome

Facet syndrome can be caused by trauma, such as a whiplash injury of the neck. Abnormal postures can overload spinal tissues, including the facet joints, and cause inflammation and pain in these joints. More commonly, degenerative changes in the cervical, thoracic and lumbar spine can lead to abnormal stress and strain. This results in increased loads on the facet joints.

Symptoms of Facet Syndrome

Cervical (neck) facet joint syndrome can be felt in the areas of the base of the skull, neck, upper or mid-back, and even shoulders. Some patients may even present due to frequent headaches. Thoracic (mid back) facet syndrome is less common than cervical and lumbar (low back) facet syndrome and is probably related to restricted motion at these levels due to the rigidity of the thoracic spine. Pain experienced in thoracic facet syndrome is likely to be felt locally near the affected joint segment, often close to the midline. The lumbar spine has considerable motion and high compressive forces. Facet pain from these joints is quite common. Pain is usually felt directly over the affected joints, but may also be felt in the buttocks, hips, groin, and back of the thighs depending on which facet joint is injured.

D iagnosing Facet Syndrome

At your initial consultation your spinal specialist will diagnose your pain or symptoms. The visit will begin with a physical exam and collection of health history. In addition you will be asked to share the timeline and triggers of your pain and discomfort. Diagnosis of facet syndrome is made primarily from the history and physical exam. If facet syndrome is suspected, diagnostic imaging can be obtained. Imaging includes but is not limited to X-Rays, MRI, and CT scan. X-Rays will be done in-house at our facility during your initial consultation. These studies might show facet hypertrophy (enlargement of the joint) which would indicate the joint is under excessive stress.

Treatment Options

Most conservative treatments for facet syndrome involve postural correction, soft tissue massage and manipulation of the affected area. Chiropractors utilizing spinal manipulation along with physiotherapy are adept at restoring movement and normal function in restricted and painful facet joints. Co-Treatments if/when necessary, are usually combined with a course of anti-inflammatory medications to decrease inflammation. Muscle relaxers may be used to decrease local muscle spasms.